EXPLANATION OF SIGNIFICANT DIFFERENCES

SITE: Rochester Property
BREAK: 5.9
OTHER:

10299380

to the August 1993
Final Record of Decision for the
Rochester Property Superfund Site
Travelers Rest, Greenville County, South Carolina

AUTHORIZING SIGNATURE

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1/31/06

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Region 4
United States Environmental Protection Agency

Date

PART I: INTRODUCTION AND STATEMENT OF PURPOSE

This Explanation of Significant Differences (ESD) has been prepared to document a significant change to the remedy as described in the August 31, 1993 Final Record of Decision (ROD) for the Rochester Property Site (the Site) located in Traveler's Rest, South Carolina. The USEPA ID Number of the Site is SCD 980 840 698.

As the lead agency, the United States Environmental Protection Agency (EPA) is issuing this ESD pursuant to public participation requirements specified in Section 117(c) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and Section 300.435(c)(2)(i) of the National Contingency Plan (NCP). The South Carolina Department of Health and Environmental Control (SCDHEC) is the support agency for this Site.

This document makes one (1) change to the August 1993 ROD. The purpose of this ESD is to eliminate the remedial goal (RG) for manganese based on updated risk assessment information.

The ESD will be added to the Administrative Record for the Site. The Administrative Record can be viewed at the following two (2) locations:

Travelers Rest Branch Library
17 Center Street
Travelers Rest, SC 29690
Phone: 803/834-3650

U.S. EPA Records Center
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303
Phone: 404/562-8870
Fax: 404/562-8788

PART II: SITE HISTORY AND SELECTED REMEDY

The Site consists of approximately 4.5 acres in a rural unzoned portion of Greenville County, South Carolina, approximately three (3) miles west of the town of Travelers Rest. The Site received wastes which were thought to include wood glue, print binders, powder materials, natural guar gums, adhesive for food packages and adhesive restick for envelopes. The waste materials were placed in four (4) trenches sometime between late 1971 and early 1972. Each of the trenches was approximately forty (40) feet long, three (3) feet wide and ten (10) feet deep. The waste was subsequently removed from the Site in 1990 by Colonial Heights Packaging (the Responsible Party) under an Administrative Order on Consent (AOC), entered into with EPA in June 1989.

The Site was proposed to the National Priorities List (NPL) in June 1986 and became final on the NPL in October 1989. In February 1992, a Remedial Investigation/Feasibility Study was initiated by Colonial Heights Packaging, Inc. under an AOC with EPA. The final Feasibility

Study Report was submitted in May 1993. A final remedy was issued by EPA in the ROD dated August 31, 1993. The ROD specified in-situ air-sparging to treat contaminated groundwater. The remedy involved pumping air through wells in the saturated zone of the aquifer. As the air (bubbles) made contact with the contaminants in the water, the contaminants would be volatilized into the outside air through vent pipes. The system began operating in 1995 and worked as designed. All the wells that showed contamination during the Remedial Investigation, including those with the highest contamination, reached performance standards. As documented in the July 2002 Explanation of Significant Differences, wells that did not show any contamination at the time of the Remedial Investigation began to show elevated levels of trichloroethene. At that time, the system was turned off. A modified system was installed down-gradient of the original system. The new sparge system used a mixture of ozone and air, in order to facilitate a faster reaction rate. With both sparging systems, it was expected that, in addition to stripping the trichloroethene, the addition of oxygen to the groundwater would promote the biodegradation of bis (2-ethylhexyl) phthalate, and soluble manganese would be oxidized to insoluble forms. The insoluble manganese would then precipitate, and be re-deposited in the soils, where it is naturally occurring. The February 2005 Five-Year Review of the remedy noted that manganese levels were not being reduced as expected.

PART III: BASIS FOR THE DOCUMENT

The August 1993 Final ROD stated that at the completion of the remedy, the cancer risk remaining at this Site will be 1×10^{-6}, and the Hazard Index, the risk measure for non-carcinogens, would be less than 1, values which are considered protective of human health and the environment. In order to achieve this, the following groundwater remedial goals were set for the constituents of concern at the site:

Constituent	Remedial Goal*	Risk/HI at Remedial Goal**
Manganese	0.18 mg/L	< 1.0 HI
Trichloroethene	0.005 mg/L	10^{-6} Risk
Bis (2-ethylhexyl) phthalate	0.006 mg/L	10^{-6} Risk

* - mg/L = milligrams per liter
** - HI = Hazard Index

The Baseline Risk Assessment concluded that the only media posing an unacceptable risk to human health and the environment at the site was groundwater. The Future Resident scenario of the Baseline Risk Assessment resulted in a Hazard Index of >1, based on the ingestion of manganese in the groundwater. During the Remedial Investigation, manganese levels ranged from the detection limit to 1.39 mg/L, and exceeded the risk-based remedial goal of 0.180 mg/L, derived in the Baseline Risk Assessment, in 5 of 13 wells.

The second Five Year Review of the remedial action was completed in February 2005. One of the issues noted was that manganese levels were not reduced as expected. At the time of the

review, the remedial goals for trichloroethene and bis (2-ethylhexyl) phthalate were nearly reached. Between the first and second Five Year reviews, the toxicity criterion for manganese in EPA's Integrated Risk Information System (IRIS) database was changed; manganese is now believed to be less toxic than previously thought and the hazard quotient for manganese in groundwater is an order of magnitude lower. Because the new IRIS information shows the manganese to be within acceptable risk levels at the site, the remedial goal for manganese is being eliminated from the remedy.

IV. DESCRIPTION OF SIGNIFICANT DIFFERENCE

The significant difference from the 1993 Final ROD and subsequent 2002 ESD is the removal of the remedial goal for manganese. The remedy will remain the same in all other respects, including remedial goals, as noted in Section III above, for trichloroethene and bis (2-ethylhexyl) phthalate.

PART V: SUPPORT AGENCY COMMENTS

SCDHEC has reviewed this ESD and the supporting documentation, and concurs with EPA's modified remedy for the Rochester Property Site. The SCDHEC concurrence letter is attached to this document for reference.

PART VI: STATUTORY DETERMINATIONS

Pursuant to the requirements of CERCLA Section 121, the modified remedy for the Rochester Property Site is adequately protective of human health and the environment, complies with applicable or relevant and appropriate requirements, is cost-effective and utilizes permanent solutions and alternate treatment technologies or resource recovery technologies to the maximum extent practicable. The remedy continues to satisfy the preference for remedies that employ treatment to permanently and significantly reduce the volume, toxicity, or mobility of hazardous wastes as a principal element.

PART VII: PUBLIC PARTICIPATION COMPLIANCE

This ESD and other supporting documentation will be placed in the Administrative Record locations referred to in Section I above for public review. A notice will be published in a local newspaper of general circulation to summarize the ESD and reasons supporting the modified remedy. EPA will accept public comments for up to thirty (30) days following issuance of this ESD. Revision of the ESD may be considered only if a significant new information or considerations are presented. Therefore, the public participation requirements set forth in NCP Section 300.435(c)(2)(i) have been met.

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